

**What is claimed is:**

1. A method for producing protein-coated polystyrene microparticles comprising the steps of:
  - (a) combining a suspension of uncoated microparticles with a protein, the protein being a partner of a bioaffinity binding pair, the suspension comprising a buffer having a pH of 10.0 to 12.5,
  - (b) incubating the combination from (a) for a period of time whereby the protein is coated by adsorption onto the microparticles, and
  - (c) separating the non-adsorbed protein from the protein-coated microparticles.
2. The method of claim 1, wherein the protein is in a polymerized form.
3. The method of claim 1, wherein the protein is a polymerized streptavidin.
4. The method of claim 1, wherein the microparticles have a hydrophobic surface or a surface functionalized with epoxide groups.
5. The method of claim 1, wherein the microparticles have a magnetizable core.
6. A polystyrene microparticle produced by the method of claim 1.
7. An immunoassay method for detecting an analyte in a sample comprising the steps of:
  - (a) forming a mixture by contacting the sample with an analyte-specific binding partner and a polystyrene microparticle coated with a first member of a bioaffinity binding pair according to the method of claim 1, wherein the analyte-specific partner is conjugated to a second member of the binding pair,
  - (b) incubating the mixture from step (a) whereby the analyte binds with the binding partner and the microparticle coated with the first member of the bioaffinity pair binds to the second member to form a complex,

- (c) separating the complex formed in step (b) from the mixture, and
  - (d) determining the amount of analyte bound to the microparticles or remaining unbound in the mixture.
8. A test kit for performing an immunoassay test procedure comprising test-relevant components and a polystyrene microparticle produced by the method of claim 1.